

UNCLASSIFIED

AD NUMBER

ADB006708

LIMITATION CHANGES

TO:

Approved for public release; distribution is unlimited. Document partially illegible.

FROM:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; 06 JUN 1975. Other requests shall be referred to U.S. Army Command and General Staff College, Attn: ATSW-DD, Fort Leavenworth, KA 66027. Document partially illegible.

AUTHORITY

ODDR&E ltr, 20 Jan 1976

THIS PAGE IS UNCLASSIFIED

THIS REPORT HAS BEEN DELIMITED
AND CLEARED FOR PUBLIC RELEASE
UNDER DOD DIRECTIVE 5200.20 AND
NO RESTRICTIONS ARE IMPOSED UPON
ITS USE AND DISCLOSURE.

DISTRIBUTION STATEMENT A

APPROVED FOR PUBLIC RELEASE;
DISTRIBUTION UNLIMITED.

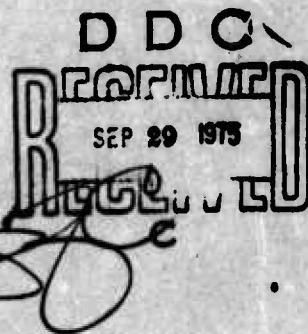
(2) *js*

A New Unit for Europe

✓
**Study Number 6 -Major Philip R. Harper
U.S. Army Command and General Staff College
Fort Leavenworth, Kansas 66027**

6 June 1975

Final Report - 6 June 1975



Distribution limited to U.S. Government agencies only; Proprietary Information; 6 June 1975. Other requests for this document must be referred to U.S. Army Command and General Staff College, Fort Leavenworth, Kansas 66027

Prepared in partial fulfillment of graduation requirements for:

**U.S. Army Command and General Staff College, Fort Leavenworth, Kansas
66027**

AD B 006708

DDC FILE COPY

ACCESSION for	
NTIS	White Section <input type="checkbox"/>
DDI	Self Section <input checked="" type="checkbox"/>
UNANNOUNCED	
JUSTIFICATION	
BY	
DISTRIBUTION/AVAILABILITY NOTES	
Dist.	AVAIL. NO. OF SPECIAL
B	23

**Best
Available
Copy**

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) <u>6</u> A New Unit for Europe.		5. TYPE OF REPORT & PERIOD COVERED <u>9</u> Final Report, 6 June 1975
7. AUTHOR(s) Study Nr 6		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS Student(s) at the U.S. Army Command and General Staff College during Academic Year 1974-75		8. CONTRACT OR GRANT NUMBER(s)
11. CONTROLLING OFFICE NAME AND ADDRESS U.S. Army Command and General Staff College ATTN: ATSW-DD Fort Leavenworth, Kansas 66027		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS <u>12</u> 33P.
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) <u>10</u> Philip R. Harper		12. REPORT DATE <u>11</u> 6 June 1975
		13. NUMBER OF PAGES 28 pages
		15. SECURITY CLASS. (of this report) Unclassified
16. DISTRIBUTION STATEMENT (of this Report) Distribution limited to U.S. Government agencies only; Proprietary Information; 6 June 1975. Other requests for this document must be referred to U.S. Army Command and General Staff College, Fort Leavenworth, Kansas 66027.		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES This study was prepared by a student(s) in partial fulfillment of graduation requirements for the U.S. Army Command and General Staff College.		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) See Reverse Side		

The purpose of the study was to recommend a task force concept, based on an analysis of the factors of command and control, fire support, and weapons mix which would perform best for U.S. forces in NATO.

The study employs war gaming techniques to evaluate the relative merits of various combined arms force concepts as they might be used to defend against a motorized rifle battalion reinforced by one tank company and an antitank battery. Various battalion size units were created and deployed on the war game site. A platoon plus slice of each of these test battalions was then war gamed against a standard threat. The results were compared against the performance of the present U.S. system of task organization.

The study concludes that the war game and the literature supports the requirement for at least three long-range ATGM systems per committed platoon with one backup to replace battle losses. The mix should include at least one Shillelagh system due to the effect of enemy artillery suppressive fires on "soft" ATGM systems. The best force for U.S. troops in NATO would be a standard mech battalion task force with a 13 tank (M60A2) armored company cross attacked.

1473-b

Unclassified

A NEW UNIT FOR EUROPE

NATO STAFF STUDY

BY

PHILIP E. HARPER, MAJOR, INFANTRY

STUDENT IDENTIFICATION NUMBER 874

EARL S. PERRY
LTC, IN
ACADEMIC COURSE

TABLE OF CONTENTS

	Page
SECTION I: GENERAL	1
PURPOSE	1
OBJECTIVE	1
BATTLE AREA	1
CONCEPT	1
DEFENSE PLAN	2
SECTION II: WAR GAMES	2
INPUTS AND PARAMETERS	2
TACTICS	6
SECTION III: RESULTS	7
COMMAND AND CONTROL	7
FIRE SUPPORT	9
NIGHT OPERATIONS	10
WEAPONS MIX	11
SECTION IV: BATTLE RESULTS	14
SECTION V: CONCLUSIONS/RECOMMENDATIONS	16
END NOTES	18
BIBLIOGRAPHY	19

A NEW UNIT FOR EUROPE

SECTION 1: GENERAL

Purpose:

The purpose of this study is to employ war gaming techniques to evaluate the relative merits of various combined arms force concepts as they might be employed to defend the Fulda Gap area of the Federal Republic of Germany.

Objective:

To recommend a task force concept, based on an analysis of the factors of command and control, fire support and weapons mix, which would perform best in the defense of the Fulda Gap.

Battle Area:

The task force concepts were war gamed on a 2 km by 5 km site northeast of Fulda. The exact coordinates are NF564312-549302-590270-573260 (Map 1). This site was one of several available in the Fulda Gap area for which current, dependable line-of-sight (intervisibility) data existed. This particular site was selected based on the judgment of the military observers present that this site was the best example of tank terrain of all sites studied.¹

Concept:

a. Threat force composition was based on enemy doctrine as taught at United States Army Command and General Staff College. Assumptions were:

(1) The threat was a motorized rifle battalion reinforced by one tank company and an anti-tank battery (Figure 1).

(2) The threat battalion attacked on 1.5 km front with two reinforced companies in 1st echelon. First echelon was 250m in depth. The second echelon was a reinforced motorized rifle company which followed 800m behind the first echelon.

(3) Air, ADA, the smooth-bore 76mm gun, the RPG 7, and the SEATTER Missile were not played.

(4) All T-62 tanks were assumed to carry only armor piercing fin stabilizing discarding sabot (APFSDS) and high explosive anti-tank (HEAT) ammunition.

b. Various battalion size units were created and deployed on the test site. A platoon plus slice of each of these test battalions was then war gamed against a standard threat. The results were compared against the performance of the present U.S. system of task organization.

Task force one was the current U.S. organization (Figure 2).

Task force two (Figure 3) was a variation of a combined arms force concept developed and war gamed for the anti-armor elective. The conclusion of the anti-armor study group was that task force two was a better organization for battle on a European battlefield than current organizations. While this statement is true, it is unrealistic due to the heavy cost of creating this 26 tank task force compared to the 17 tank task force one.

Tank force three (Figure 4) given 4 tanks or 25 percent of the tanks needed to create tank force one. It would take 48 fewer tanks to tank organize a mechanized division. These excess tanks could be used to create new tank units to build a corps reserve.

Defense Plans:

a. Tank force one defense plan:

- (1) Two company teams on line.

Team "A"

2 Inf Plt
1 Tk Plt

Team "B"

3 Inf Plt
1 Tk Plt

- (2) Reserve consisted of one company team(-) with one infantry platoon and one tank platoon.

- (3) This force had 16 TOW crews, 17 tanks and 18 Dragon trackers available for anti-armor defense.

- (4) Six TOW crews were given to TM A, eight TOW crews were given to TM B and two TOW crews were given to the reserve.

- (5) This force concept was war gamed using one half of TM A consisting of one infantry platoon, a light tank section, four TOW crews and three Dragon trackers (Figure 5).

b. Tank force two defense plan:

- (1) Three company teams on line.

Team "A"

2 Inf Plt
1 Tk Plt

Team "B"

2 Inf Plt
1 Tk Plt

Team "C"

2 Tk Plt
1 Inf Plt

(2) Reserve is one company team consisting of two tank platoons and one infantry platoon.

(3) This force had 10 TOW crews, 26 tanks (M60A1), and 22 Dragon trackers available as anti-tank weapons.

(4) Four TOW crews were given to TM A and TM B. Two TOW crews were given to TM C. The reserve company had no TOWs.

(5) This force concept was war gamed using one half of TM B consisting of one infantry platoon, a heavy tank section, two TOW crews and three Dragon trackers (Figure 6).

c. Task force three defense plan:

(1) Two company teams on line.

Team "A"

2 Inf Plt

1 Tk Plt

Team "B"

3 Inf Plt

1 Tk Plt

(2) Reserve is one company team consisting of one infantry platoon and one tank platoon.

(3) This force had 16 TOW crews, 13 tanks (M60A2) and 18 Dragon trackers available as anti-tank weapons.

(4) Four TOW crews were given to TM A, eight TOW crews were given to TM B, and four TOW crews were given to the reserve.

(5) This force concept was war gamed using one half of TM A consisting of one infantry platoon, a light tank section, two TOW crews and three Dragon trackers (Figure 7).

SECTION II: "MAP GAME"

Inputs and Parameters:

a. Line-of-sight (intervisibility) data were derived from the TETAN Study. Important points from this study regarding the terrain used for the battle are:

(1) Many engagement opportunities exist at very long range, i.e., greater than 3000m.²

(2) There appears to be sufficient exposure time (with respect to acquisition, response, tracking and missile flight times and threat vehicle speed) for anti-tank guided missile (ATGM) systems to successfully engage targets at long range (2500 to 3000m).

(3) These data are valid for this site and may or may not be representative of the entire Fulda Gap area.

(4) Intervisibility data are highly range dependent.

(5) Specific information on the probability of detection (P_d) with four man observation teams per ATGM crew can be found in the TETAN Study.³

b. Probability of kill (P_k) given the probability of a hit (P_h) was available for all weapons systems at all ranges in both static and moving conditions (20kph) and various degrees of exposure.⁴

c. Map 2 is a blow up of the chosen battle area. It shows the ten approach lanes through the platoon slice of the battlefield. The enemy is attacking to the southeast. The numbers and letters on the U.S. side of the battle area indicate weapons positions from which intervisibility data were

data base will give the intervisibility data needed in order to fight a combat action. For example, a TOW at position 1 could detect and engage a vehicle at 3000m on lane 10.

d. Weapon parameters.⁵

- (1) All basic loads were played.
- (2) Acquisition, response, tracking and missile flight times were played corresponding to the appropriate engagement range.

Tactics:

a. The threat force:

- (1) Approach formation is shown in Figures 5, 6, and 7.

(2) Tactic was a rapid approach with a 15 kph rate of march to attack.

(3) Was assumed to be engaged with the front of threat vehicles fully exposed while moving at 15 kph.

(4) Adopted the following rules of engagement based on several trial games to develop an experience factor.

(a) BRDM's engage suspected ATCM sites at 2500m (maximum effective range) whenever possible.

(b) T-62 tanks engage suspected targets at 1500m due to low PK at longer ranges.

(c) BRDM's deploy at 1000m to support attack by fire.

b. The defence force:

- (1) TOW missile teams were employed in pairs.

(2) Minimize crew and four observers to increase Fd.

(3) Adopted the following rules of engagement based on several trial games to develop an experience factor.

(a) TOW crews would engage at 3000m (maximum effective range) whenever possible.

(b) BRDM's are classified as high-priority targets for engagement ASAP by ATGM crews. TOW and M60A2 crews make every effort to engage BRDM's between 3000m and 2500m thus allowing defense to fire one, perhaps two TOW's per crew before BRDM's can come within SAGGER maximum effective range (2500m).

(c) M60A1 tanks engage targets at 1500m. First priority target is any remaining BRDM's, second priority target is T-62. The object is to destroy at least one tank in each attacking company ASAP in order to break down enemy tank platoon integrity. This hindered the enemy's ability to mass his platoon fires on one target thereby reducing his Fk.

(d) BMP's are last priority target for engagement.

SECTION III: RESULTS

Command and Control:

The platoon level war game and a research of the literature identified some difficulties in command and control of ATGM systems. These problems occur in the handoff of AT targets acquired by the platoon leader to various ATGM crews. This problem can be identified in five separate areas: the ATGM crew, the location of the platoon leader, threat tactics, handoff methods and communication.⁶

a. The ATGM crews were so busy firing, rearming, firing and moving that they could not have responded to any target given to them by any external source, including the platoon leader, except by ignoring targets the ATGM crew had themselves acquired.

b. Platoon leader location was a contributing factor due to the width of the defensive position. The width makes it virtually impossible for any one individual to have the same fields of view as all ATGM crews. The complication is that the platoon leader would not know if an ATGM crew had acquired a specific target.

c. Threat tactic of a rapid approach to attack (15 kph) demands the full attention of the ATGM crew to be directed into the battle area for early target acquisition. ATGM crews were too busy to pay much attention to an outside source providing more targets.

d. Handoff method: require each ATGM crew to prepare detailed range cards showing numerous reference points in their sector of fire. The platoon leader would then handoff his acquired target via the reference point method using the appropriate range card.

e. An analysis of communications reveals that each ATGM crew must have communications between mutually supporting crews and with a mobile platoon leader.

Fire Support:

Field artillery for friendly units was not played since it would force the threat to "button-up" under any force concept considered. Research reveals that enemy artillery has a significantly different effect between task force concepts one and two and a task force concept such as number three which includes at least two of the CHILLBLAST systems (M551's or M60A2's).⁷

a. ATGM crews stored the TOW missile inside the M113 from 15 percent to 50 percent of the time when enemy artillery was played. Research reveals that the missile is not stored when enemy artillery is not played. When it is played, however, even random fire impacting in the general area is sufficient to cause the missiles to be stored, and observation of the threat force to be decreased. The result is that the enemy is engaged at closer ranges and fewer TOW's are fired.

b. In the defense, the SHILLELAGH is really a long-range ATGM system with armor protection. Literature supports the contention that enemy artillery suppressive fire serves to stimulate SHILLELAGH crews to faster action which increases the engagement rate. This is in direct opposition to the TOW crew response in which the engagement rate decreases. Additionally, under enemy artillery suppressive fire, the SHILLELAGH system inflicts more kills per player than any other ATGM system. This reverses earlier findings which showed that TOW crews inflict the most kills per player but without playing enemy artillery.

Night Operations:

Research was conducted to determine the effectiveness of ATGM systems under night conditions with artificial illumination but without night vision devices.

a. Engagement ranges decreased noticeably during night operations.

b. Total kills

(1) Defense inflicts about 1/2 to 2/3 of the kills shown in daytime operations under a rapid approach technique.

(2) Threat cannot pinpoint ATGM systems in spite of flash signatures which caused an increase in their rate of tank fires but a decrease in threat inflicted kills. Quantitative data to support this were not available in the literature.⁸

Weapon Mix:

a. TOW's consistently inflict more casualties per player than M60A1's and Dragons due to long-range capability. It is critical that the TOW's engage the BRDM's ASAP to destroy them before the BRDM gets within SAGGER range. This strips the SAGGER capability from the threat force and allows the TOW and shorter range AT defense systems to destroy the T-62 tanks without a SAGGER threat. All surviving TOW's had expended 75 percent of their basic load when the battle ended. The M60A2 was the next most effective weapon system.

(1) Task force one (four TOW's). Three of the six T-62 tanks were destroyed by TOW's. All three of the BRDM's were destroyed by TOW's; two of the four TOW's were destroyed.

(2) Task force two (two TOW's). Two of the six T-62 tanks were destroyed by TOW's; two of the three BRDM's were destroyed by TOW's; one BRDM survived. Both TOW crews were destroyed.

(3) Task force three (two TOW's, two M60A2's). Three of the six T-62 tanks were destroyed by TOW's and three T-62 tanks were destroyed by the M60A2's. Two BRDM's were destroyed by TOW's and one BRDM was destroyed by the M60A2. Two BRDM's were destroyed; one by TOW and the other by M60A2. All TOW's survived and one M60A2 was destroyed. The TOW's survived because the threat tried to hit the tanks first since the M60A2 was a more easily detected target.

(4) Summary (TOW Force)

<u>Total Kills For</u>	<u>Inflicted</u>	<u>Sustained</u>
TF 1	6 (3 T-62's, 3 BRDM's)	2
TF 2	4 (2 T-62's, 2 BRDM's)	2
TF 3	6 (3 T-62's, 2 BRDM's, 1 BMP)	0

(5) Four long-range ATGM systems must be available to each committed infantry platoon to increase the ability of that unit to survive in the Fulda Gap. Three long-range ATGM systems facilitated destruction of all three BRDM's at this particular battle site. Therefore, one extra weapon is needed on site so that the platoon can beat off the second echelon attack as well as the first. M60A1's low successful engagement probability, except at relatively short ranges (1500m or less), rendered this system virtually useless until the TOW's had destroyed the enemy BRDM's and the T-62 tanks had closed to within 1500 meters. Platoon leader must exercise strict control over the initial fires of his M60A1 force.

(6) Summary (Tank Force)

<u>Total Kills For</u>	<u>Inflicted</u>	<u>Sustained</u>
TF 1 (M60A1)	3 (T-62's)	1
TF 2 (M60A1)	3 (T-62's)	3
TF 3 (M60A2)	5 (3 T-62's, 1 BRDM, 1 BMP)	1

(7) A light tank section is sufficient as long as enough long-range ATGM systems are present in defensive positions. The M60A2 should replace the M60A1's in the forward deployed mechanized divisions.

(2) Summary (Dragon)

<u>Total Kills For</u>	<u>Inflicted</u>	<u>Sustained</u>
TF 1	0	0
TF 2	1 (T-62)	0
TF 3	0	0

Dragon weapons have a very short range and medium ability to destroy tanks (Pk).

a. Task force two (three Dragons). Two of the three Dragons fired in this battle. One of the two expended its entire basic load. One T-62 was destroyed by a Dragon. No Dragons were destroyed by the enemy force.

b. Task forces one and three (three Dragons). The enemy had been defeated before closing to 750m which was initial engagement range established for the Dragon. Therefore, the Dragon was never fired in their battles.

SECTION IV: BATTLE RESULTS

Task Force One:

a. Threat force was stopped well short of 750m of the defensive position. All six T-62 tanks in the threat first echelon were destroyed, all three BRDM's were destroyed, BMP's in the first echelon had expended all SAGGERS; threat second echelon was intact except that two BMP's had fired their SAGGERS.

b. The defense force sustained 50 percent destruction of its TOW crews, and 50 percent of its HGOAL's. All surviving TOW crews had expended 75 percent of their basic load. Four long-range ATCM systems improved survivability of the tank force by destroying all BRDM's early and engaging threat T-62 tanks before they closed to APFSDS range.

Task Force Two:

a. Threat force was stopped within 500m of defensive position. All six T-62 tanks in threat first echelon were destroyed, two of three BRDM's were destroyed, BMP's in first echelon had expended all SAGGERS; threat second echelon was intact.

b. The defense force sustained 100 percent destruction of TOW crews by the time the threat had closed to 1250m, 100 percent destruction of HGOAL's by the time the threat had closed to 500m. Dragons were required to destroy final T-62 in first echelon thus stopping threat attack. One Dragon crew had expended its basic load. The failure to destroy all three BRDM's early was critical and almost caused the defense to collapse. Threat expended all SAGGERS in the first and second echelons.

Task Force Three:

a. Threat force was stopped well beyond 750m of the defensive position. All of the first echelon tanks were destroyed (6 T-62's) as well as all three BRDM's. Two BMP's were also destroyed before the threat turned back.

b. The defence force lost one of its two tanks (M60A2's). The TOW's had expended 75 percent of their basic load. The surviving M60A2 had expended over 90 percent of its basic load and the M60A2 that was destroyed had expended over 75 percent of its basic load.

SECTION VI: CONCLUSIONS/RECOMMENDATIONS

Command and control problems are about equal for each of the task forces looked at.

Enemy artillery does suppress "soft" ATGM crews which decreases the number of kills sustained by the threat force and allowing the threat force to get closer to the defensive position. This favors "harder" systems and thus task force three because it provides a harder ATGM weapon.

Night operations played with artificial illumination but without night vision devices shows a noticeable decrease in ATGM system engagement ranges. Threat force will sustain only 1/2 to 2/3 of the kills shown herein. It will also inflict fewer casualties. Night operations favor the force with more close-in AT systems, in this case task force two.

Weapons mix favors task force three. The war game and the literature supports the requirement for at least three long-range ATGM systems per committed platoon with one backup to replace battle losses. The mix should include at least one SHILLBLASH system due to the effect of enemy artillery suppressive fires on "soft" ATGM systems.

a. In order to provide sufficient TOW crews to committed units, each battalion AT platoon should have 12 TOW crews; infantry companies should have at least two organic TOW crews.

b. One 13 tank M60A2 company is required per committed battalion. The number of M60A2 tanks supporting each infantry

platoon is at least two. This is based on the assumption that sufficient (2 or more) long-range ATGM systems are supporting each infantry platoon.

c. BRDM's are the threat force's most effective weapon and must be attacked and destroyed early in the battle. This makes the difference between success and near-failure. The requirement to destroy BRDM's early favors the force with the largest number of long-range ATGM weapons, task force three.

Overall Recommendations:

The critical factor in the battle is the ability to engage and destroy all three BRDM's early and at extended range (2500m to 3000m). This requires at least three long-range ATGM systems per committed platoon. Therefore, this analysis must recommend task force three.

ENDNOTES

1. Annex C, Analysis of Results, Site 2F, Vol. II, TETAM Study, October 1972. p.C-95.
2. Ibid. p.2-2.
3. Part II, Chapter 3, Vol. IV(U), TETAM Study, May 1974.
4. Addendum 1(S), Vol. VIII(U), TETAM Study, February 1974.
5. Ibid.
6. Appendix 3, Annex C, Vol. VIII(U), TETAM Study, February 1974. p.C-8-1 to C-8-14.
7. Appendix 5, Ibid.
8. Appendix 6, Ibid.

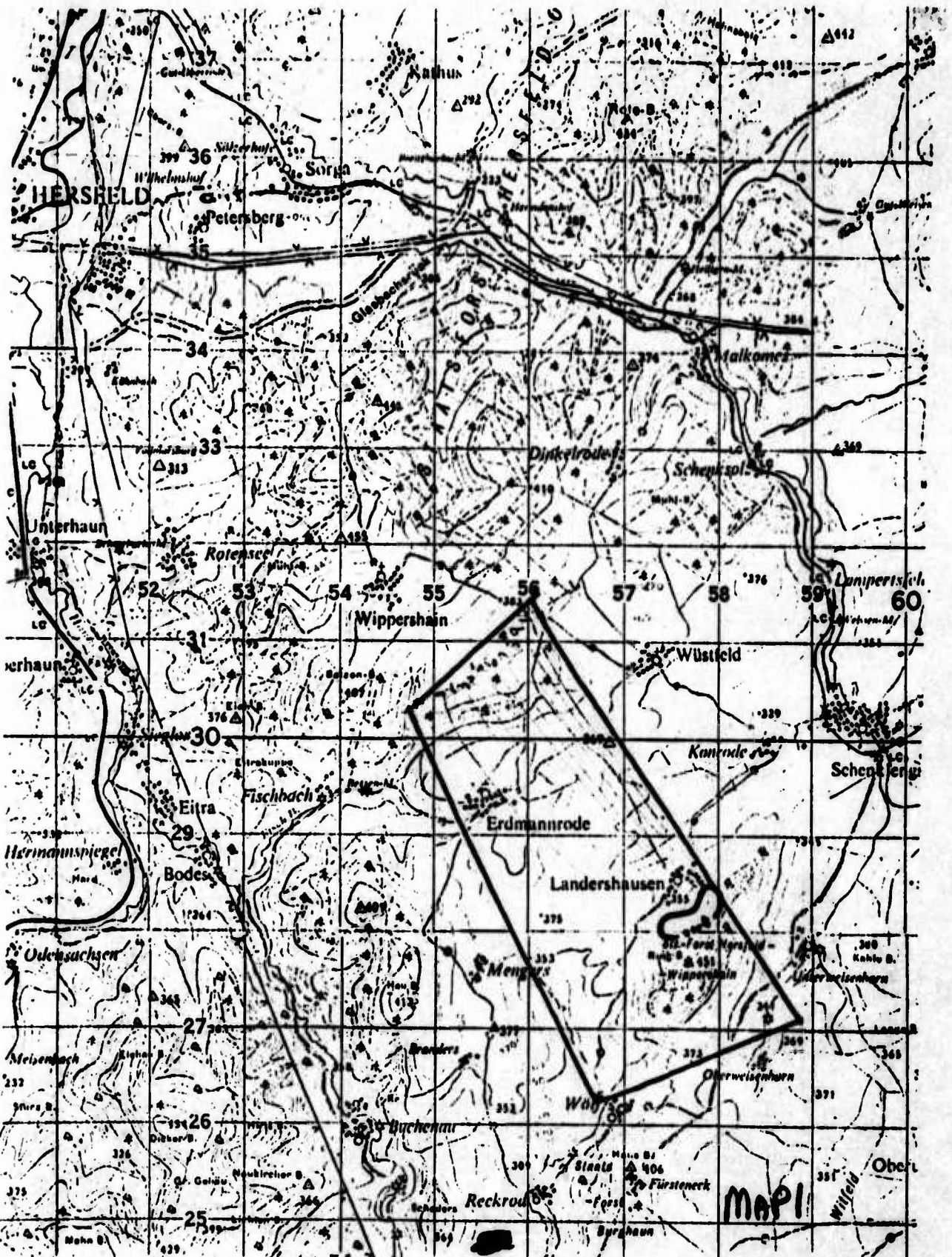
BIBLIOGRAPHY

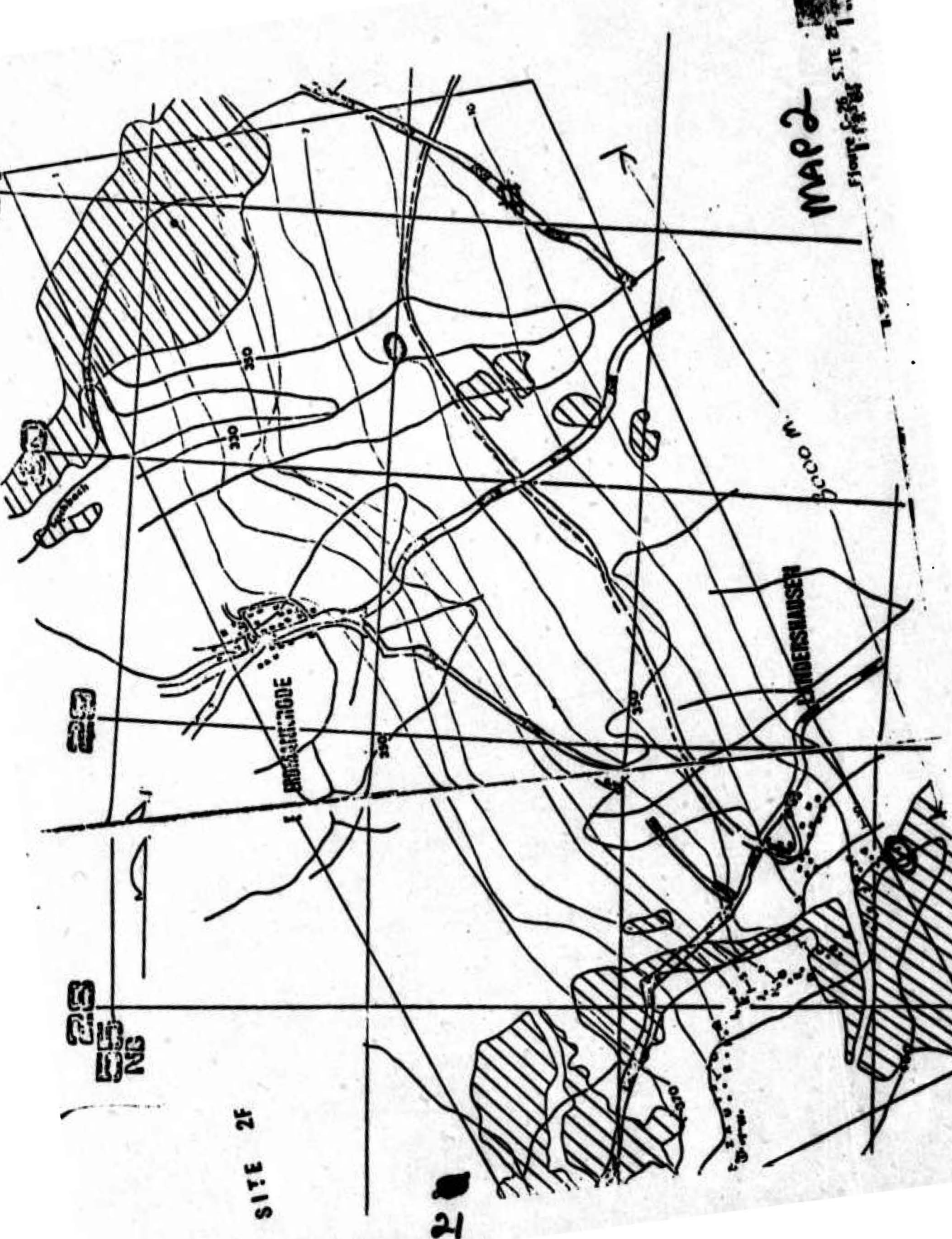
Analysis of ABRAAM Model Results (U), Vol. I, July 1974. .

Tactical Effectiveness Testing of Anti-tank Missiles (U), Vol. II, October 1972 (U); Vol. IV (U); Vol. VIII (U), February 1974; Addendum 1 to Vol. VIII, February 1974 (C); Vol. IX (U), February 1974.

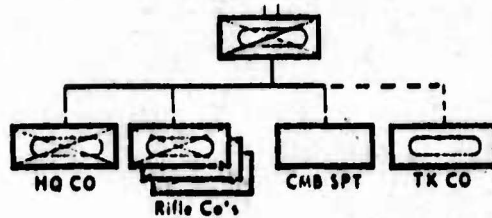
U.S. Army Training and Doctrine Command, TRADOC Bulletin #1, Range and Lethality of U.S. and Soviet Anti-armor Weapons, September 1974 (U).

U.S. Army Training and Doctrine Command, TRADOC Bulletin #2, Soviet ATGM's, Capabilities and Countermeasures, February 1975, (C).





THREAT MOTORIZED RIFLE BATTALION
(W. BMP) REINFORCED W. 1 MED TANK CO



ANTIARMOR WPNS

 BMP - - - - - 30

 SAGGERS - - - - - 32*

 SPG-9 - - - - - 2

 RPG-7 - - - - - 29

AUTO CANNON 73-mm - - - - - 30*

 TANKS - - - - - 10

INDIRECT FIRE WEAPONS

120mm MORTAR - - - - - 6

INFANTRY SMALL ARMS

Rifles AKM 7.62mm - - - - - 269

LMG PK 7.62 mm - - - - - 54

COAX MG 7.62 mm - - - - - 30

* Saggars and 30 Auto 73-mm
mounted on BMP


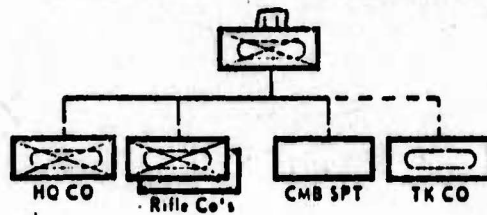
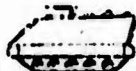
 BRDM - - - - - 3
W/14 SAGGERS


FIG 1

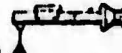
US MECHANIZED INFANTRY BATTALION
TASK FORCE W 1 TANK CO CROSS ATTACHED

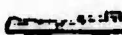



ANTIARMOR WPNS

24 - - - - - APC (In two Rifle Co's) 

16 - - - - - TOW 

22 (In Rifle & Scout Pl't's) - - - - - DRAGON 

58 - - - - - LAW 

17 - - - - - ~~M109~~ - - - - - TANKS 

INDIRECT FIRE WEAPONS

6 - - - - - 81mm MORTAR

4 - - - - - 4.2" MORTAR

INFANTRY SMALL ARMS

547 - - - - - Rifles M - 16 5.62 mm

30 - - - - - LMG M - 60 7.62 mm

53 - - - - - HMG Cal .50

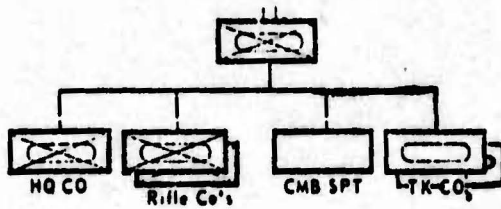
9 - - - - - CANNON 20 mm

76 - - - - - 40 mm Grenade Launcher

** TWO PER RIFLE SQUAD


FIG 2
TASK FORCE ONE


US MECHANIZED INFANTRY BATTALION




ANTIARMOR WPNS

24 - - - - - APC (In two Rifle Co's) 

10 - - - - - TOW 

22 (In Rifle & Scout Pl's) - - - - - DRAGON 

58 - - - - - LAW 

26 - - - - - ~~ENGINE~~ - - - - - TANKS 

INDIRECT FIRE WEAPONS

6 - - - - - 81mm MORTAR
4 - - - - - 4.2" MORTAR

INFANTRY SMALL ARMS

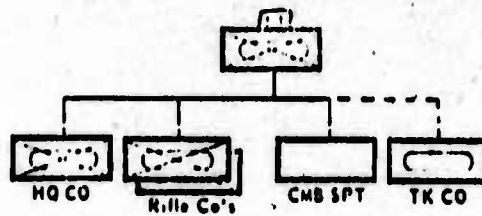
547 - - - - - Rifles M-16 5.62 mm
30 - - - - - LMG M-60 7.62 mm
53 - - - - - HMG Cal .50
9 - - - - - CANNON 20 mm
76 - - - - - 40 mm Grenade Launcher

** TWO PER RIFLE SQUAD

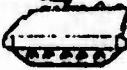
FIG 3
TASK FORCE TWO


2X


US MECHANIZED INFANTRY BATTALION
TASK FORCE W-1 TANK CO CROSS ATTACHED





ANTIARMOR WPNS

24 - - - - - APC (In two Rifle Co's) 

16 - - - - - TOW 

22 (In Rifle & Scout Pl't's) - - - - - DRAGON 

58 - - - - - LAW 

13 - - - - - M48A2 - TANKS 

INDIRECT FIRE WEAPONS

6 - - - - - 81mm MORTAR

4 - - - - - 4.2" MORTAR

INFANTRY SMALL ARMS

517 - - - - - Rifles M-16 5.62 mm

30 - - - - - LMG M-60 7.62 mm

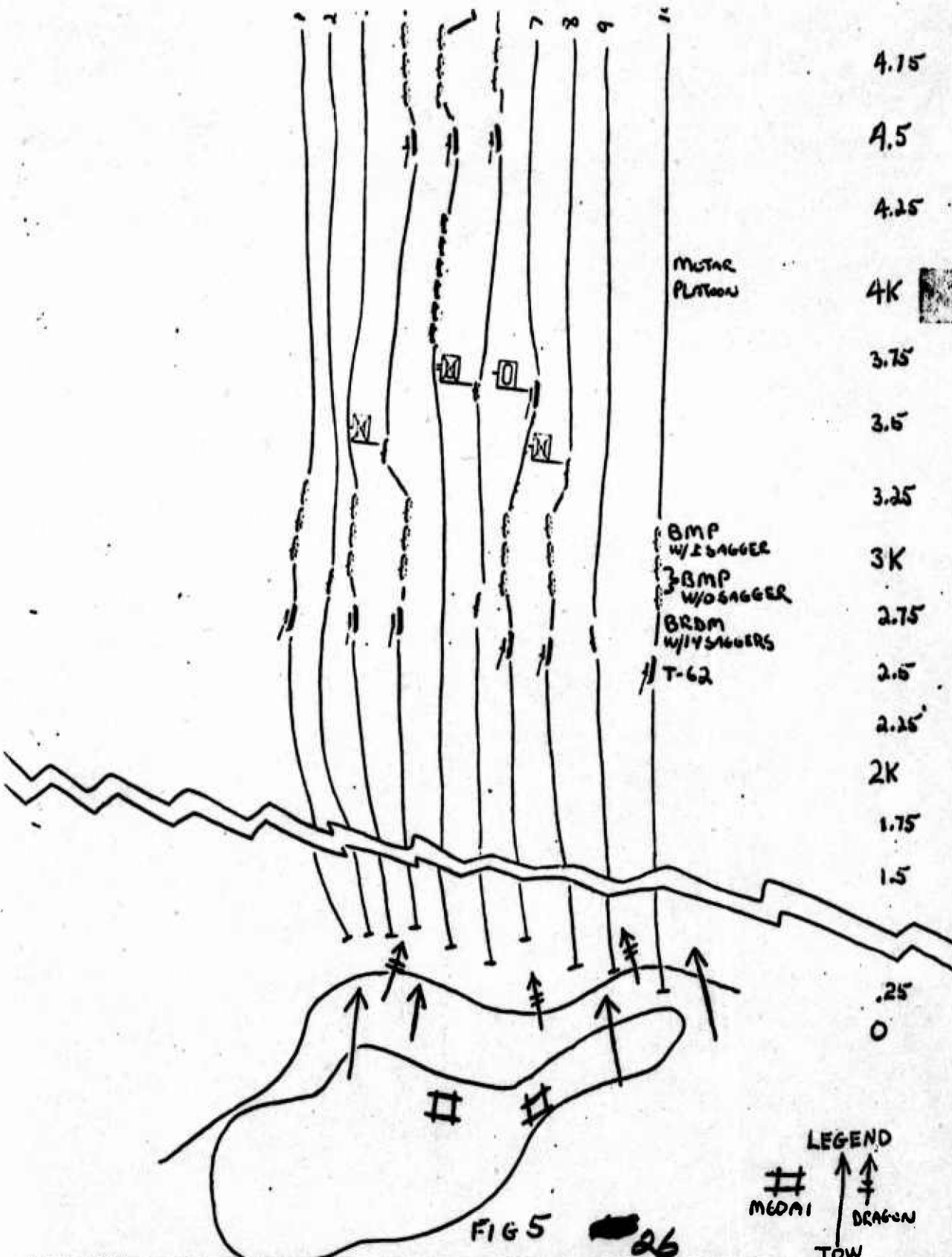
53 - - - - - MMG C-1 .50

9 - - - - - CANNON 20 mm

76 - - - - - 40 mm Grenade Launcher

*** TWO PER RIFLE SQUAD

Fig 4
TASK FORCE THREE



4.15

4.5

4.25

4K

3.75

3.5

3.25

3K

2.75

2.5

2.25

2K

1.75

1.5

.25

0

MOTOR
PLATOON

BMP
W/ 2 SAGGER
3 BMP
W/ 0 SAGGER
BRDM
W/ 14 SAGGERS

T-62

LEGEND

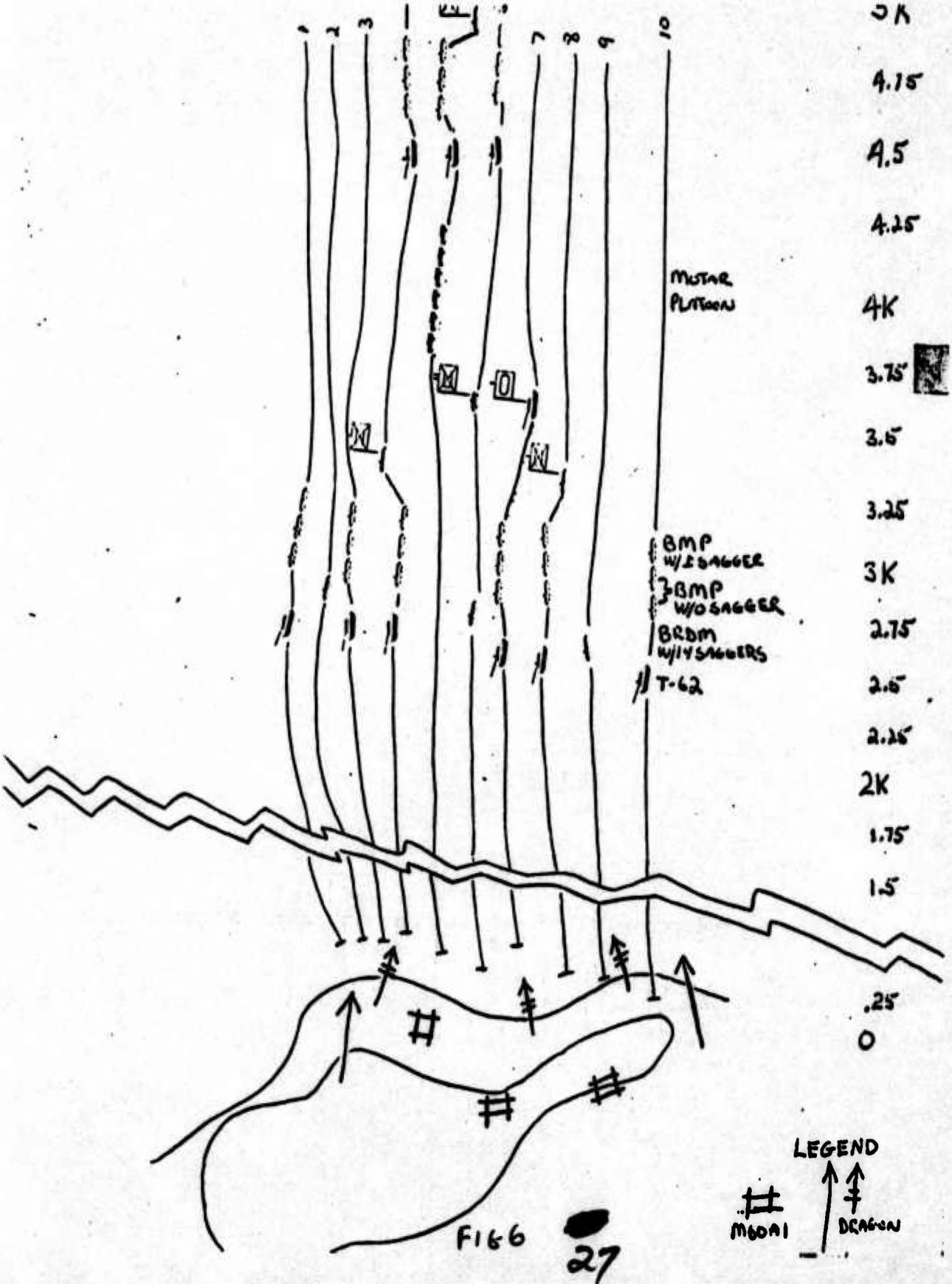
MEDAI

↑
DRAGON

↑
TOW

FIG 5

26



MOTOR
PLATFORM

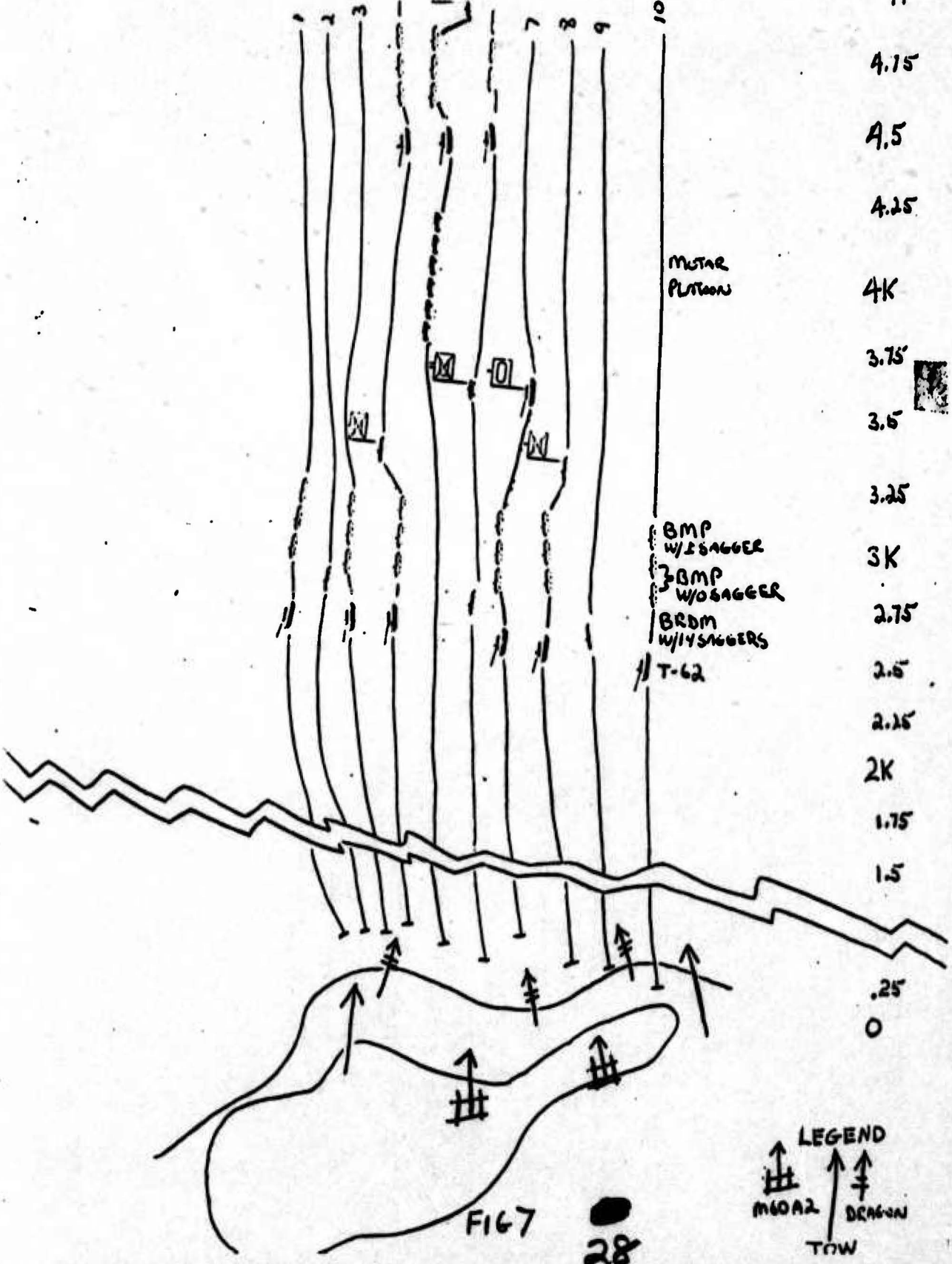
BMP
W/2 SAGGER
3 BMP
W/0 SAGGER
BRDM
W/1 SAGGER
T-62

LEGEND

MOBI
↑ DRAGON

F166

27



4.75
4.5
4.25
4K
3.75
3.5
3.25
3K
2.75
2.5
2.25
2K
1.75
1.5
.25
0

MUTAR
PLATOON

BMP
W/2 SAGGERS
3 BMP
W/0 SAGGERS
BRDM
W/14 SAGGERS
T-62

FIG 7

28

LEGEND
M60A2
Dragon
TOW